Pedestrian Forum Fall 2014 Volume 65



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Printed Materials Now Available from FHWA

The FHWA Safety Office just printed several materials that will be useful to states and localities. All of these materials can be ordered in limited quantities from the "Order Copies of Brochures, CD's and Other Resources" web page. The newly available Resources are:

A Guide For Maintaining Pedestrian Facilities for Enhanced Safety

The guide identifies noteworthy practices and barriers for sidewalk/ shared use path maintenance: what works and what does not work based on experience from State and local agencies.

The guide also provides examples and experiences from jurisdictions that have developed effective policies for selecting and maintaining pedestrian facilities in terms of responsibilities, allocation of costs, and related issues. Click here to order.



Pedestrian Hybrid Beacon Guide: Recommendations and Case Study

To help support the adoption of the pedestrian hybrid beacon (PHB), the FHWA Safety Office developed a <u>12-page</u> <u>document</u> that expands on the

FHWA guidance memo detailed here: http://safety.fhwa.dot.gov/provencountermeasures/index.htm and offers a case study of Buford Highway in Dekalb County, Georgia--a location that successfully used PHB to solve a safety problem. Click here to order.



Promotional Postcards for Pedestrian Safer Journey– (FHWA-SA-14-031) and for Bicycle Safer Journey– (FHWA-SA-14-032)

Pedestrian Safer Journey and Bicycle Safer Journey are online resources that help educators, parents and others who care about bicycle and pedestrian safety get the conversation started with children and youth about how to bike safely to their destinations.

The revised **Safer Journeys** are updated to reflect current times and technology. There are English and Spanish versions for kids ages 5-9, 10-14, and 15-18. Both resources feature videos that are accompanied by a quiz or discussion and an educator's resource library can be used as an introduction to pedestrian and bicycle safety skills or to

augment a comprehensive curriculum.

Another new feature of the Safer Journey site is that all of the videos can now be downloaded-a handy feature since internet access is not available to everyone. The user just goes to the page that shows the video they want and directly below the video screen is a blue box with an option to "right click and save a video." Pedestrian and Bicycle Safer Journey are now web-based and no longer available in CD Rom format. These postcards provide direction on how to access the resource and are perfect for handing out at International Walk to School Day, Bike to School Day, bike safety rodeos and other related events.

Click here to order.



Bicycle Road Safety Audit Guidelines and Prompt Lists

Developed 2 years ago, this document provides a detailed road safety audit focused on bicyclists. We now have printed copies.

Click here to order.

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Building Bicycle and Pedestrian Networks Pays Off: Nonmotorized Transportation Pilot Program Report Available.

Despite large increases in nonmotorized transportation, the pilot communities collectively observed a 20 percent decline in the number of pedestrian fatalities and a 28.6 percent decline in the number of bicycle fatalities from 2002 to 2012. Since August 2005, FHWA has overseen the Nonmotorized Transportation Pilot Program (NTPP) designed to study the impacts of increased investment in walking and bicycling facilities and program. The NTPP provided over \$25 million dollars to each of four pilot communities (Columbia, Missouri; Marin County, California; Minneapolis area, Minnesota; and Sheboygan County, Wisconsin) to make nonmotorized transportation system improvements.

Congress required FHWA to submit two reports describing the results of the program and FHWA submitted the <u>second</u> report to Congress in 2012.

In May 2014 FHWA released a new report documenting continued progress in developing bicycling and walking networks. Key outcomes described in the 2014 report include:





Safety: Despite large increases in nonmotorized transportation, the pilot communities collectively observed a 20 percent decline in the number of pedestrian fatalities and a 28.6 percent decline in the number of bicycle fatalities from 2002 to 2012. Similarly, over the same time period, three of the communities experienced declines in the number of pedestrian injuries, and pedestrian injury rates declined between 17.9 percent and 55.1 percent in each of the four communities. Bicycle injuries increased in three of the four communities, but bicycling injury rates (incidents per number of trips) declined between 8.6 and 38.2 percent in each of the four communities.

• *Mode Share Shift*: An estimated 85.1 million vehicle





miles traveled (VMT) were averted from increased nonmotorized trips between 2009 and 2013 relative to a 2007 baseline. The walking mode share increased 15.8 percent from 2007 to 2013, while the bicycling mode share increased 44 percent over the same period. This translates to 22.8 percent and 48.3 percent increase in the number of pedestrian and bicycle trips across the four communities.

- Access and Mobility: NTPP expanded 1/4-mile bicycle network access to approximately 240,000 people, 106,000 housing units, and 102,000 jobs. More than 70 percent of all NTPP infrastructure projects connect to employment centers, schools, parks, and recreation areas.
- Environment and Energy: In 2013, NTPP saved an estimated 25 pounds of CO₂ pollution per capita in the pilot communities, or a total of 9,065 tons. This is equivalent to saving over 1.25 gallons of gas per capita in 2013 or nearly 3.6 million gallons between 2009 and 2013. NTPP saved an estimated 3.6 million gallons of gasoline between 2009 and 2013. This translates to a savings of an estimated 34,629 tons of CO₂ emissions over that time period.

2014 Handbook for Designing Roadways for the Aging Population

The FHWA just released the revised version of the 13-year old Highway Design Handbook for Older Drivers and Pedestrians. Now entitled the 2014 Handbook for Designing Roadways for the

Aging Population, the latest edition incorporates new research, expands the range of applications covered by the Handbook, and introduces format changes—including a web-based

version—that will facilitate access and use by engineering professionals to improve our streets and highways in the years ahead.

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The 2014 Handbook is composed of two parts. Part 1 presents recommendations on treatments and countermeasures to address specific areas of concern for aging road users. The treatments presented in Part 1 are followed by a more lengthy Part II, which presents the rationale, supporting evidence, and previous research results for each treatment. Four supplemental appendices include technical notes, a procedure for measuring the visibility of treatments, a glossary, and an extensive list of references.

The treatments in the Handbook focus on five broad categories of roadway features, each containing a number of specific design elements for which guidance is presented.

The top priority is intersections. Next, well documented difficulties with merging/weaving and lane changing maneuvers provide opportunities for treatments at interchanges. Roadway segments, with an emphasis on curves and passing zones, plus highway construc-

tion/work zones, are included due to heightened tracking (steering) demands that may increase a driver's workload along with an increased potential for unexpected events that require a rapid response. Finally, highway rail grade crossings merit consideration as sites where conflicts are rare, and unexpected, and where issues with detection may be exaggerated due to the sensory loss that comes with advancing age.



Several New Reports and Resources Related to Pedestrian and Bike Data

Modes Less Traveled: Bicycling and Walking to Work

The United States Census Bureau released this report which highlights the trends and socio-economic and geographic differences between motorized and non-motorized commutes. This report—the Census Bureau's first focus on biking and walking to work—is one of many that examines specific aspects of commuting.

National Survey of Bicyclist and Pedestrian Attitudes and Behavior (Volumes 1, 2, and 3)

The National Highway Traffic Safety Administration (NHTSA) announced the availability of this report back in February. NHTSA recent-

ly announced that the database for this survey is available. To access the database, go to NHTSA's National Telephone Surveys page and click on the "box" that corresponds to "National Survey of Bicyclist and Pedestrian Attitudes and Behavior—2012 Survey—Database."

Design and Implementation of Pedestrian and Bicycle Specific Data Collection Methods in Oregon and Pilot Study for the Report

A comprehensive review of pedestrian and bicycle data collection methods and counting technologies was conducted as part of this study. Oregon data sources were compiled and estimation techniques applied to Oregon data. A pilot study was conducted to test bicycle and pedestrian counting methods at signalized intersections with 2,070 controllers. The report also provides a summary of recommendations regarding factoring methods and the implementation of a statewide non-motorized data collection system.

Estimating Bicycling and Walking for Planning and Project Development: A Guidebook

This National Cooperative Highway Research Program Report contains methods and tools for practitioners to estimate bicycling and walking demand as part of regional, corridor, or more project level analysis.





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This *Pedestrian Forum* is available on the Web at http://safety.fhwa.dot.gov/ped-bike/pedforum/

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Helping Communities to provide safe and convenient transportation choices to all citizens, whether it's by walking, bicycling, transit, or driving is a high priority of the U.S. Department of Transportation and the Obama Administration. Each year, unfortunately, pedestrian fatalities comprise about 13 percent of all traffic fatalities and there are approximately 5,000 pedestrian deaths. Another 70,000 pedestrians are injured in roadway crashes annually. Pedestrian safety improvements depend on an integrated approach that involves the four E's: Engineering, Enforcement, Education, and Emergency Services. The Pedestrian Forum highlights recent pedestrian safety activities related to the four E's that will help save lives.

Other Resources from the US Department of Transportation Now Available

Speed Management Program Plan

The United States Department of Transportation (USDOT) Speed Management Team (consisting of NHTSA, FHWA, and Federal Motor Carrier Safety Administration) developed this plan as an update to the 2005 Speed Strategic Initiative and presents a vision for the actions the USDOT plans to take in the coming years to address Speed Management and reduce the injuries and fatalities caused by speeding-related crashes.

Speeding has been recognized as a significant factor in approximately one third of fatal crashes for more than a decade—speeding also increases pedestrian and bicyclist crash severity. While speeding is a national problem, the balance between risk and mobility must be determined at the local level. With this in mind, the Speed Management Program Plan addresses speeding from six district focus areas: Data, Research and Evaluation, Technology,

Enforcement, Engineering, and Communications. The six focus areas are intended to address the dangers of speeding, create synergy among partners and stakeholders involved in Speed Management, and result in meaningful change. It is expected that these priorities may evolve over time and will be revisited periodically when review of the program plan is updated.

High Risk Rural Roads Manual

This new FHWA manual allows users to quickly identify and compare cost effective, low-cost, and proven infrastructure treatments to address crash problems on high risk rural roads. Based on research into State, local, and Tribal agencies' noteworthy practices, the manual:

-Describes where treatments may

be most effectively used and

-Provides information on each treatment's safety benefits, initial and recurring maintenance costs, and benefit-cost ratio.

Non-motorized users such as pedestrians and bicyclists are covered in chapter 4.4.

